

## Duofix

# 1-unit and multi-section units Instructions for assembly



ENGLISH

#### Important notes for retailers/partners and end users

Please read thoroughly before assembly and operation! These instructions must be kept by the end consumer!



Li	<b>st of contents</b> Fehler! Textmarke nicht definie	ert.
1	Important Notes / Safety Notes	4
	1.1. Warnings	4
	1.2. Tips and recommendations	
	1.3. Safety instructions	
	1.4. Fundamental safety instructions	
	1.5. Qualifications	
	1.6. Transport	
	1.7. Lifting with ropes	
	1.8. Fixing material	
	1.9. Ladders	
	1.10. Partly mounted awnings	
	1.11. Intended use	
	1.12. Unsupervised operation	
	1.13. Reading the operating instructions	0 6
	1.14. Proper and safe use	
	1.15. Functional description	
	1.16. Important	
		0
2	Duofix with screw-in base	7
2		1
	2.1 Bases and distances between centre lines	7
	2.2 Base for 1-unit systems	8
	2.3 Assembly preparation	
	2.4 Installing Duofix on screw-in bases	
	2.5 Installing the Duofix in slab bases	
	2.6 Note the post is standing up on the ground during this process	
	2.7 Storm protection for slab bases	
	2.8 Installing storm protection	
3	Preparing the brackets for the awning installation	16
-		
	3.1 Topas	
	3.2 Opal Design	
	3.3 Plaza Viva	
	3.4 Topas bracket assembly	
	3.5 Opal bracket assembly	
	3.6 Plaza Viva bracket assembly	
	3.7 Bolting the top bracket to the crossbeam	
	3.8 Attaching and bolting the safety shield	22
4	Electrical connections	25
_		~~
5	Functional check	26
6	Operation	26
7	Eitting multi contion unito	27
1	Fitting multi-section units	
	7.1 Description of multi-section units	
	7.2 Base for multi-section units at the coupling point	
	7.3 Assembly sequence	
	7.4 Functional check	
	7.5 To check the functions of the unit	
8	Cleaning	31

9	General notes on the fabric	31
10	Fault analysis	32
11	Disposal	33
12	Handover	33
	12.1 Handover certificate	34

#### 1 Important Notes / Safety Notes

#### 1.1. Warnings

• The warnings differentiate between personal injury and damage to property. The signal word "Danger" is used for personal injury, and "Caution" for property damage.

	Immediate danger to life and limb!
IMPORTANT	Immediate danger to the product and environment!

#### 1.2. Tips and recommendations

( <b>1</b> )	Highlights useful tips and information that enable fast and correct installation.

#### 1.3. Safety instructions

- The installation and operating manual must be read and observed.
- Observe the corresponding accident prevention regulations.
- Ensure when installing the awning that all existing electrical connections are disconnected.
- Cordon off a large space around the installation site.
- Check that all scaffolding and building facilities are duly safe and secure.
- Observe the stipulations relating to dowels and fixings.
- Only work with fully intact and appropriate tools.
- Keep plastic sheeting, packaging material and small parts away from children risk of suffocation!
- For personal safety, it is important that these instructions are complied with.
- Non-compliance means the manufacturer does not carry any liability.

The customer must retain all instructions, and if the product is sold, they must be given to the new owner

#### 1.4. Fundamental safety instructions

## 

#### **Personal injury**

Risk of personal injury due to improper use of the Terrazza.

Please read and observe the safety instructions contained in this section.

# 🚺 IMPORTANT

#### Product and property damage

Risk of damage to the product and property due to improper use of the Terrazza.

Please read and observe the safety instructions contained in this section.

#### 1.5. Qualifications

The instructions for assembly are aimed at qualified technicians who have knowledge of and are experienced in the following areas:

- Safety at work, operating safety and accident prevention regulations
- Use of ladders and scaffolding
- Handling and transporting long, heavy components
- Handling and transporting glass panes
- Handling tools and machines
- Fitting the fixing materials
- Estimation of the building structure
- Start-up and operation of the product

If one of these qualifications is lacking, a qualified installation firm must be brought in.

#### 1.6. Transport

The maximum permissible axle loads and gross vehicle weight of the goods vehicles must not be exceeded. Loading a vehicle can alter its handling characteristics.

The transported goods must be mounted properly and securely. The awning packaging must be protected against moisture. Softened packaging can come loose and cause accidents. Packaging which has been opened for incoming goods inspections must be sealed again properly for further transport. When unloaded, the awning must be carried to the place of installation the right way round so it does not have to be turned round again in a confined space. The instructions on the packaging about which way up the awning should be placed must be noted.

#### 1.7. Lifting with ropes

If the awning needs to be raised to a higher level using ropes, the awning must be:

- removed from the packaging;
- attached to the hauling ropes so that it cannot slide out;
- lifted horizontally and evenly. The same applies when disassembling the awning.

#### 1.8. Fixing material

Responsibility for the installation work that is being carried out on-site must always rest with the foreman; it is not possible to issue uniformly applicable instructions due to the differing structural conditions and building regulations that apply at every site. Above all, this implies that all bolts and screws required to affix the weinor roof to the on-site connections (back and side of house wall, concrete base, etc.) must be suitable for the on-site building conditions and the statics requirements.

#### 1.9. Ladders

Do not lean ladders against the awning or fix them to the awning. Ladders must be on a firm base and provide adequate support. Only use ladders with adequate load-bearing capacity. Anti-fall guards:

Workers run the risk of falling when working at elevated heights. Suitable fall protection equipment must be used.

#### 1.10. Partly mounted awnings

With awnings which are partly mounted in the factory, secure the spring-tensioned parts (see labelling) against unintentional opening. Do not remove this until the awning has been fully installed.

There is a high risk of injury due to the awning parts labelled as spring tensioned!

#### 1.11. Intended use

Awnings may only be used as sun protection.

Alterations such as attaching items or conversions not envisaged by weinor may only be carried out with weinor's written consent.

Additional loads on the awning caused by hanging objects from it or by anchoring ropes may result in damage or cause the awning to fall and are therefore not permissible.

#### 1.12. Unsupervised operation

When working in the range of the awning's movement, the automatic controls must be switched off. There is a danger of trapping or the system falling down.

Measures must also be taken to ensure that the awning cannot be manually operated unintentionally. These include cutting off the power source, e.g. by disconnecting the fuses or removing the connector coupling from the drive. The crank handle must also be removed and stored safely during manual operation.

If awnings are operated by several users, a priority locking device must be installed (controlled interruption of power supply from outside), making it impossible to open or retract the awning at all.

#### 1.13. Reading the operating instructions

Read the operating instructions before using the product for the first time.

For personal safety, it is important that these instructions are complied with.

Non-compliance means the manufacturer does not carry any liability.

The customer must retain all instructions, and if the product is sold,

they must be passed onto the new owner.

All the installation steps described in these instructions and the details about the product must be observed.

Once the awning has been successfully installed, these instructions must be given to the user and kept

available.

#### 1.14. Proper and safe use

Duofix has been designed for use as a sun protection unit and – at upwards of  $14^{\circ}$  - as an outdoor weather protection unit.

The awning must be retracted whenever winds reach force 5 on the Beaufort scale, or whenever there are signs of frost or

snowfall.

#### 1.15. Functional description

Only high-quality corrosion resistant materials are used in the Duofix. The profiles are made from galvanized

and powder coated steel profiles and aluminium. All connecting parts, such as screws, are made of stainless steel. All outside aluminium parts are powder coated.

#### 1.16. Important



Both awnings must always be open while using the folding arm awnings! The awnings must only be used up to the permitted wind resistance category! Open awnings must not be left unattended!

#### 2 Duofix with screw-in base

#### 2.1 Bases and distances between centre lines



B = Markisenbreite

Abb.	Name	Maße in mm
	Achsmaß A	B – 100
J	Breite C mit Aufschraubständer beidseitig	A + 200
	Breite D mit Fundament	A + 800
	Breite E mit Plattenständer (wenn nach außen montier	A + 1200 t)
	(nicht bei Reihenanlagen)	
	Pfosten 70 x 70	3000
	Quadratrohr Stabilisator 60 x 60	1500
	Universalschiene	B – 1140

Aufstelloption: Aufschraubständer Hier für eine Markise mit Länge B = 5000 mm (Achsabstandsmaß A = B - 100)





Bases may only be laid by professional personnel!

The bases must be mounted on supporting natural frost-free ground beyond the specified cross sections and dimensions. The applied permissible bearing load of 250 kN/m2 must be responsibly checked on site, and measures must be taken to stabilise the ground, if applicable.

Watch out for any supply lines at ground level during the excavation work, if applicable.

Use concrete mixes for strength class C20 / 30.

Leave the base concrete to harden for a few days depending on the weather before installing the screw-in bases.

Carry out drilling samples, if applicable.



Note:

Standard ducts can be poured into the bases for electrical supply lines.

#### 2.3 Assembly preparation

Unpack all the building units belonging to the Duofix mounting system and place them in front of the

installation location sorted



#### 2.4 Installing Duofix on screw-in bases

• Mark the distance between centre lines for the screw-in base installation position on bases



• Screw the corner joint to the crossbeam and post.

What you need:

Consumables pack for corner joint and crossbeam bolting 8.4 washer M8x30 A2 hexagon head set screw



• Place the screw-in bases in the axis position and compare with the Duofix distance between centre lines



- Mark the drill positions through the screw-in bases
- Drill boreholes in the bases
- Bolt the screw-in bases to the bases.

Note: Recommended dowel:

#### Bemessung nach ETAG Anhang C Injektionssystem AVM-BGZ-R (A4) 125 M12 Zulassung ETA-04/0116

Dübelschnittkräfte		
Zugkräfte	Querkräfte	
N <sub>Sd</sub> (1) = 15,52 kN	V <sub>Sd</sub> (1) = 0.00 kN	N <sup>h</sup> <sub>Sd</sub> = 15,52 kN
N <sub>Sd</sub> (2) = 15,52 kN	V <sub>Sd</sub> (2) = 0,00 kN	V <sup>h</sup> <sub>Sd</sub> = 0,00 kN
		N <sup>9</sup> <sub>sd</sub> = 31,05 kN
		$V_{Sd}^{9} = 0.00 \text{ kN}$

Note:

Make sure the screw-in bases are installed perpendicularly and at the same level, unevenness in the base can be balanced out using a spackle.



Note:

Only use concrete anchors approved by construction supervision and check the torques specified by the manufacturer after installation.

With Duofix with screw-in bases, the square tube stabiliser has to be pushed into the posts • before installing the mounting system to increase the wind resistance.



• Position and erect the Duofix frames on the bolted screw-in bases.





Make sure there is sufficient self securing. There is a risk of crushing! Securing the posts in the screw-in bases:



What you need: Consumables pack for Duofix screw-in bases M8x30 A2 hexagon head set screw



#### 2.5 Installing the Duofix in slab bases

• Screw the levelling feet at the bottom of the slab base frame

11

• Move the slab bases into the distance between centre lines position.

7

12

#### Note:

The slab bases can be positioned inside or outside the frames.

- Loosely pre-mount the clamping plate with M8x20 A2 countersunk hex head screw and M8x20 A2 countersunk hex head screw to the frame
- Insert 4 patio plates per frame
- Adjust the Duofix frame pre-mounted in frames as described in sections 3.1 and 3.2

Verstellfuß Bodenständer

5

Art.-Nr. roh

111774

111352

111528

111350

111533

111348

101824

111530

111587

120679

120583

126285

101857

Art.-Nr. farbig

111775

111849

111529

111557

111537

111552

keine

keine

keine

keine

keine

кеіпе

кеіпе

#### 2.6 Note the post is standing up on the ground during this process

- Screw the AM12x400-A2 threaded rod for the free-standing awning in the bottom frame
- Place the fabric support rollers on the threaded rods
- Insert more patio plates
- Position the upper frame at an angle to the posts, position them on the patio plates and both using the clamping plate
- 4 more patio plates in the upper frame per slab base
- Bolt the upper frame using M12-A2 hexagon cap nuts and 13-140HV-A2 washers
- Bolt the clamping plate to all positions on the lower and upper frame
- Screw the stiffening plate faceplate onto the clamping plate using two M8x20 A2 countersunk hex head screws

Note:

Square tube stabilisers are not inserted in the posts with slab bases.

Please see the enclosed structural standards for the possible uses of slab bases and use of storm protection

Or refer to our website in the Duofix product folder.

#### 2.7 Storm protection for slab bases

In the event of hurricane warnings, storm protection is inserted on Duofix with slab bases depending on the wind zone and territory category.

Note:

If portable Duofix awnings are used in different places, the use of storm protection must be protected every time at the respective location.

#### 2.8 Installing storm protection

- Replace the hexagon cap nuts on the slab bases with M12-A2 ring nuts with steel rope
- Replace the hexagon cap nuts on the post with M10-A2 ring nuts with steel rope
- Connect the eyebolts using a M6 turnbuckle and set the tension evenly on both sides.



### 3 Preparing the brackets for the awning installation

Three kinds of awnings can be installed on Duofix:

#### 3.1 Topas

Consumables, bag of, for affixing Topas to bracket 85



#### 3.2 Opal Design

Consumables pack for bolting the Opal to 180 bracket



#### 3.3 Plaza Viva

Consumables pack for bolting the Plaza Viva to 180 bracket



Fix the brackets to the Duofix crossbeam in accordance with the provided awning installation instructions.



Attachment for Topas with roof



Attachment for Opal Design II

Attachment for Plaza Viva





# Konsolenbaugruppe: OPAL

Pos	Stk	Bezeichnung	Werkstoff	Bemerkung
1	1	Konsole 180mm	AlMgSi0,5 F22	
2	6	Scheibe ISO 7093-10-A2	A2	
3	6	Sechskantschraube DIN 933-M10x25	A2	
4	2	Wandkonsole 150 komplett	-	Baugruppe

1:5



# Konsolenbaugruppe: Plaza Vivia

Pos.	Stk.	Bezeichnung	Werkstoff	Bemerkung
1	1	Konsole 180mm	AlMgSi0,5 F22	
2	8	Scheibe 10-A2	A2	
3	8	Sechskantschraube M10x25	A2	
4	2	Wandkonsole komplett	-	

Please see the relevant instructions for installing the different weinor products, Plaza Viva, Topas and Opal Design II, to Duofix.



#### 3.7 Bolting the top bracket to the crossbeam

What you need:

M8x30 A2 hexagon head set screw 8.4 washer



M8 self-locking nut 8.4 washer M8x30 hexagon head set screw

#### 3.8 Attaching and bolting the safety shield

What you need for Opal Design and Plaza Viva Consumables pack for attaching the Opal safety shield to Duofix



• Push the screws into the crossbeam's upper groove and secure them to the safety shield's drill positions using a washer and nut.



- Fix another nut and 10 mm washer under the end of the screw.
- Screw the roof bracket profile to the wall connection roof
- C4.8x9.5 A2 Fillister head self-tapping screw



• Attach the safety shield to the bolting on the Duofix and secure it using a washer and nut.



• Fitting the Opal cover plate to the safety shield: C4.8x9.5 A2 Fillister self-tapping screw





#### 4 Electrical connections

# 

All electrical work involved in connecting the additional components must be carried out by a suitably qualified person and in accordance with the manufacturer's instructions! When fitting the accessories (sensors, probes), always ensure that they are fitted in places where they can function properly and are not restricted or hampered by unintended influences.

All leads are laid through the post up onto the crossbeam. The weitronic radio elements are also installed here.







Aufschraubständer unten gelocht (Ø40) Kabel können durch das Fundament in den Quadratrohrpfosten nach oben geführt werden

Beim Plattenständer können die Kabel seitlich in den geschlitzten Quadratrohrpfosten eingeführt werden



Die Wandanschlusskonsole hat eine Bohrung (Ø40) oberhalb des Querträgers. Kabel können so von Unterputz durch die Konsole direkt zu den Verbrauchern gelegt werden



### 5 Functional check

Open and retract the unit several times over.

During this time, check for the following and adjust if and when necessary:

- that the angle of the unit is correct
- that the fabric is not creased when open
- that the awning housing closes
- that the end positions are aligned the drive instructions

#### 6 Operation

The drive has been designed to run for no more than approx. 4 min. at a time. For this reason, the thermo protector may be triggered if the built-in drive is run several times. Depending on the outside temperature, the drive can be operated again after 10 to 15 minutes. If any other faults arise, these must be rectified (see Sect. 11).

If the awning is fitted incorrectly or put into operation despite defects, all guarantee and warranty claims will be voided!

#### 7 Fitting multi-section units

#### 7.1 Description of multi-section units



With multi-section units, two Duofix are basically erected next to each other in one coupling screw-in base.





#### 7.2 Base for multi-section units at the coupling point







The Duofix frames are fixed to the crossbeam at the top in the middle using the "85 bracket"





Note:

The first step is to assemble the left-hand section of the unit, Section A, as described in the corresponding section.

On wide, coupled units and multiple units fitted side by side

(up to approx. 10 m in width), it will be necessary to allow for thermal expansion in the bracket profiles (2 mm for every metre the unit is wide). Ensure there is enough space between the units and any obstacles at the side (walls).

#### 7.3 Assembly sequence

Check the delivery and the dimensions Premounting Duofix A frame Premounting Duofix B frame Mounting the screw-in base Mounting Duofix unit A Mounting Duofix unit B

Fault analysis Functional check Handover

#### 7.4 Functional check

Safety note

When opening the awning for the first time, the working range of the awning and the area below it must be kept clear.

A visual inspection of the fixings and brackets must be performed after the awning has been operated

for the first time.

When carrying out test runs, never use automatic controls or switches if

the awning is not in the operator's line of vision (danger of awning starting unintentionally). We recommend that you connect a test cable to the drive input.

The installation and adjustment instructions supplied by the manufacturer of the drive, switches and controls must be observed.

#### 7.5 To check the functions of the unit

Open and retract the unit several times over. During this time, check for the following and adjust if and when necessary:

- Position when opened and retracted,
- That the construction closes properly
- For loud noises,
- That the angle of the unit is correct.

The drive has been designed to run for no more than approx. 5 min. at a time. For this reason, the thermo protector may be triggered if the built-in drive is run several times. Depending on the outside temperature, the drive can be operated again after 10 to 15 minutes. If any other faults arise, these must be rectified (see Sect. 12).

If the awning is fitted incorrectly or put into operation despite being defective, all guarantee and warranty claims will be voided!

### 8 Cleaning

1. Powder-coated aluminium parts:

To maintain the coated aluminium parts in the proper condition, they must be cleaned once a year at least and more often if subjected to heavier weathering.

To clean, use clear water and add a few drops of pH-neutral or very slightly alkaline detergent.

2. To clean an acrylic awning fabric, we recommend the following procedure:

Remove dust and dirt from the dry awning from time to time using a

brush or vacuum cleaner

Remove stubborn dirt from the awning fabric using 40°C lukewarm water and a cleaning agent

Use a cloth which has been soaked in trichloroethylene to remove grease stains Never use any other chemical agents

Certain types of soiling such as dirt can be removed effectively with the help of an eraser

3. Cleaning Soltis fabrics (PVC-based fabrics):

For best results when cleaning Soltis fabrics, use lukewarm soapy water.

#### 9 General notes on the fabric

Your awning fabric has been subjected to numerous checks. However, keep in mind that every fabric has a different surface finish. Therefore, small knots, colour spots or minor deviations and variations can sometimes be observed in the design and appearance. Even minor colour differences between panels cannot be ruled out entirely.

In the case of wide units, multiple sheets are made lengthways to the direction of drop. Some unevenness of the fabric and folds may occur near the seams since the fabric there is folded double.

Likewise, pin-hole sized holes may develop near the seams due to stitching.

Sagging of the fabric under its own weight cannot be avoided completely. This does not hamper the awning's functions, however.

Individual fabric panels are pre-stretched after weaving. In spite of this, fabric panels may not stretch uniformly and may develop unevenness near the seams. Stretching of the fabric sheets can also result in a fabric that is longer on one side.

These occurrences are not defects that have been overlooked during inspections but are attributable to technical factors. They do not form a basis for complaints, non-acceptance or price reductions.

#### 10 Fault analysis

Below, you will find a few sources of error and how to remedy them. In some cases, more detailed information can also be found in the instructions for maintenance and use.

Type of fault	Cause	Remedy
Drive not running	- No power	- Authorised person
	- Drive not connected properly	- Authorised person
	- Drive is too hot	- Wait 10 to 15 min.
	- Drive is defective	- Replace drive
	- Broken cable	- Fitter
Unit switches off with a delay	- Drive not properly set	- Fitter
	- Defective cam switch	- Replace drive cable
Unit does not retract	- Drive not set properly	- Correct drive settings
completely		
Unit not straight	- Unit not aligned	- Align unit
Not enough fabric tension	- Springs not properly	
	tensioned - Tighten	
	springs	
Unit will not tension using	- Spring retainer fully	- Slacken gears and re-tension
the gearbox	arrested	the unit
	- Special awnings (smaller	- Unit will only tension
	width, greater projection)	manually; slacken the rope
		clamp; use physical strength to
		tension the springs; tighten the rope clamp
Loud noises	- Rope skips on the rope	- Align slider to rope drum,
	drum; rope is twisted	replace rope if necessary
	- Squeaky rollers, pulley	- Lubricate bearing surfaces
	blocks or bearing surfaces	(e.g. Teflon, plastic-resistant
		sprays)
	- Clearance between drive	- Replace drive (authorised
	and fabric roller	personnel only)
Drop profile crooked when	- Unit not straight;	- Re-align unit
awning is retracted	diagonals not right	
	- Fabric seam not straight	- Line fabric

### 11 Disposal

Although this product does not contain any materials which pose a risk or danger to the environment, The parts must nevertheless be disposed of correctly.

#### 12 Handover

All operating manuals as well as the manufacturer's installation and adjustment instructions for drives, switches and controls

must be handed to the user who must be instructed in the operation of the unit. Detailed instruction on the safe and proper operation of the awning must be given.

If this is not adhered to and the awning is operated incorrectly, damage to the awning or accidents could result.

The instructions must be kept by the customer and passed on to the new owner if ownership of the awning passes to a third party.

After noting the structural conditions and completing assembly, the installation firm is to inform the user whether the wind resistance class specified by the manufacturer was achieved following assembly. If not, the installation firm must record the wind resistance class actually achieved. Automatic controls must be set to this level.

The customer must confirm to the fitter in writing that the awning is the right model and has been assembled correctly, indicating the assembly time, and that final acceptance of the awning has taken place, during which the safety notes were discussed (see handover certificate).

#### 12.1 Handover certificate

Offer/Order No.:		Company					
Customer's address:							
Tel.:							
Mobile phone:							
Email:							
Handover certificate		Date					
apparent defects: □ Yes □ No							
If 'No', what is the subject of complaint?							
*If the customer dispenses with a formal regarded as accepted.	acceptance and p	uts the awning into c	peration, the	awning s	shall be		
The customer has been duly instructed in how to operate the	The awning may	be used under the f	ollowing conc	litions:			
awning as shown in the Maintenance Instructions and Directions for Use			Useable up te	o wind st	rength		
□ Yes □ No	Wind: Rain: Risk of frost:	Rain:					
The customer has been given the following documents:							
Maintenance Instructions and Directions for Use Assembly instructions Warranty documents	□ Yes □ No □ Yes □ No □ Yes □ No	Manufacturer's instructions for assembly and setting□ Yes □ the drive, switches and controlsNo					
Miscellaneous:			Die Montage e	1 T		1	
			Name	von Uhrzeit	bis Uhrzeit	Stunden	





Markise

MARKISEN



Markise mit Volant Plus und Tempura



Markise mit Volant Plus und Paravento



PergoTex II und Tempura

TEXTILE BESCHATTUNG MIT PFOSTEN

# **INDIVIDUELLE LÖSUNGEN** MIT SYSTEM

Textiles Terrassendach Plaza Home und Paravento



Textiles Terrassendach Plaza Pro mit Paravento und VertiTex

weinor GmbH & Co. KG Mathias-Brüggen-Straße 110 50829 Cologne (Germany) www.weinor.de Hotline: +49(0)221/5 97 09-214 Fax: +49(0)221/5 97 09-898

TERRASSENDÄCHER UND GLASOASEN®



Glasoase® mit Beschattung WGM und Ganzglas-Elementen



Terrassendach mit Festverglasung SUPER LITE



Terrassendach Terrazza mit Beschattung Sottezza II